



UNITED STATES PATENT AND TRADEMARK OFFICE

Y
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,442	07/11/2003	Takahiko Koizumi	MIPFP041	4208
25920	7590	12/15/2006	EXAMINER	
MARTINE PENILLA & GENCARELLA, LLP			SELBY, GEVELL V	
710 LAKEWAY DRIVE			ART UNIT	PAPER NUMBER
SUITE 200				
SUNNYVALE, CA 94085			2622	

DATE MAILED: 12/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/618,442	KOIZUMI, TAKAHIKO	
	Examiner	Art Unit	
	Gevell Selby	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 11 July 2003 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>5-31-06 / 1-31-05</u>	5) <input type="checkbox"/> Notice of Informal Patent Application
	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-8 and 11-18 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 10 of copending Application No. 2005/0225781. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 in instant application (application 1) corresponds to claim 10 in application 2. Claim 1 in application 1 recites the same limitations as application 2, except application 1 recites the addition limitation of adjusting sharpness on the basis of focal length information. It would have been obvious to one of ordinary skill in the art to modify application 1 to remove the addition limitation, in order obtain a simpler embodiment of the invention. Claim 11 in the instant application (application 1) recites the same limitations as claim 10 in application 2; however, claim 11 in application 1 recites the additional limitation of

analyzing the image data to obtain a sharpness characteristic value. Since claim 10 in application 2 is a broader recitation of claim 11 in application 1, it would have been obvious to modify claim 11 in application 1 to get claim 10 in application 2, in order to have a simpler embodiment of the invention.

3. Claims 9 and 19 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 18 of copending Application No. 2005/0225781. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 9 in instant application (application 1) corresponds to claim 18 in application 2. Claim 9 in application 1 recites the same limitations as application 2, except application 1 recites the addition limitation of adjusting sharpness on the basis of focal length information. It would have been obvious to one of ordinary skill in the art to modify application 1 to remove the addition limitation, in order obtain a simpler embodiment of the invention. Claim 19 in the instant application (application 1) recites the same limitations as claim 18 in application 2; however, claim 19 in application 1 recites the additional limitation of analyzing the image data to obtain a sharpness characteristic value. Since claim 18 in application 2 is a broader recitation of claim 19 in application 1, it would have been obvious to modify claim 19 in application 1 to get claim 18 in application 2, in order to have a simpler embodiment of the invention.

4. Claims 10 and 20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 19 of copending Application No. 2005/0225781. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 10 in instant application (application 1) corresponds to claim 19 in

Art Unit: 2622

application 2. Claim 10 in application 1 recites the same limitations as application 2, except application 1 recites the addition limitation of adjusting sharpness on the basis of focal length information. It would have been obvious to one of ordinary skill in the art to modify application 1 to remove the addition limitation, in order obtain a simpler embodiment of the invention.

Claim 20 in the instant application (application 1) recites the same limitations as claim 19 in application 2; however, claim 20 in application 1 recites the additional limitation of analyzing the image data to obtain a sharpness characteristic value. Since claim 19 in application 2 is a broader recitation of claim 20 in application 1, it would have been obvious to modify claim 20 in application 1 to get claim 19 in application 2, in order to have a simpler embodiment of the invention.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. **Claims 1, 2, 9-12, 19, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki et al., US 6,879,343.**

In regard to claim 1, Yamazaki et al., US 6,879,343, discloses a method of performing image processing using image data generated by an image generator and image generation information that is associated with the image data and that includes at least aperture information, operating mode information, and lens focal length information at the time of generation of the image data, the method comprising the step of:

executing image quality adjustment to adjusting sharpness of the image data on the basis of the aperture information (aperture encoder 170 detects the aperture value), the operating mode information (performs in the hill-climbing AF mode), and the lens focal length information (the focal length information from the zoom encoder 169) included in the image generation information (see column 17, lines 1-28).

In regard to claim 2, Yamazaki et al., US 6,879,343, discloses the method according to claim 1 wherein the image quality adjustment step includes the steps of:

judging on the basis of the operating mode information whether to execute the image quality adjustment to adjust sharpness of the image data (see figure 12, element 1210 and column 12, lines 42-50); and

when it is judged to execute the image quality adjustment, determining a degree of sharpness adjustment on the basis of the aperture information and the lens focal length information (see column 17, lines 21-28).

In regard to claim 9, Yamazaki et al., US 6,879,343, discloses an image processing device for performing image processing using image data generated by an image generator and image generation information that is associated with the image data

and that includes at least aperture information, operating mode information, and lens focal length information at the time of generation of the image data, wherein the image processing device comprises:

an image quality adjuster (system control circuit 162) that, on the basis of the aperture information (aperture encoder 170 detects the aperture value), together with the operating mode information (performs in the hill-climbing AF mode) and lens focal length information included in the image generation information (the focal length information from the zoom encoder 169), adjusts sharpness of the image data (see column 17, lines 21-28).

In regard to claim 10, Yamazaki et al., US 6,879,343, discloses a computer program product for causing a computer to execute a process for adjusting image quality of image data, using image data generated by an image generator and image generation information that is associated with the image data and that includes at least aperture information, operating mode information, and lens focal length information at the time of generation of the image data, the computer program product comprising:

a computer-readable medium (see column 17, lines 1-5: it is inherent the microcomputer has a computer-readable medium that stores a program to execute the control program); and

it is inherent the Yamazaki reference discloses a computer program stored on the computer-readable medium, the computer program including a program for causing a computer to execute sharpness adjustment of the image data, on the basis of the aperture information (aperture encoder 170 detects the aperture

value), the operating mode information (performs in the hill-climbing AF mode), and lens focal length information (the focal length information from the zoom encoder 169) included in the image generation information (see column 17, lines 19-28).

In regard to claim 11, Yamazaki et al., US 6,879,343, discloses an method of performing image processing using image data generated by an image generator and image generation information that is associated with the image data and that includes at least aperture information and operating mode information at the time of generation of the image data, the method comprising the steps of:

analyzing the image data to obtain a sharpness characteristic value (sharpness signal outputted from the BPF 161) indicating a characteristic relating to sharpness of the image represented by the image data (see column 16, lines 64 to column 17, line 5); and

executing image quality adjustment on the basis of the sharpness characteristic value, the aperture information (aperture encoder 170 detects the aperture value), and the operating mode information included in the image generation information (performs in the hill-climbing AF mode), to adjust sharpness of the image data (see column 17, lines 6-28).

In regard to claim 12, Yamazaki et al., US 6,879,343, discloses the method according to claim 11 wherein the image quality adjustment step includes the steps of:

judging on the basis of the operating mode information whether to execute the image quality adjustment to adjust sharpness of the image data (see figure 12, element 1210 and column 12, lines 42-50), and

when it is judged to execute the image quality adjustment, determining a degree of sharpness adjustment on the basis of the aperture information and the sharpness characteristic value (see column 17, lines 21-28).

In regard to claim 19, Yamazaki et al., US 6,879,343, discloses an image processing device for performing image processing using image data generated by an image generator and image generation information that is associated with the image data and that includes at least aperture information and operating mode information at the time of generation of the image data, wherein the image processing device comprises

an image quality adjuster (system control circuit 162) that analyzes the image data to obtain a sharpness characteristic value (sharpness signal outputted from the BPF 161) indicating a characteristic relating to sharpness of the image represented by the image data (see column 16, lines 64 to column 17, line 5), and

that adjusts the sharpness of the image data on the basis of the sharpness characteristic value, together with the aperture information (aperture encoder 170 detects the aperture value) and the operating mode information (performs in the hill-climbing AF mode) included in the image generation information (see column 17, lines 21-28).

In regard to claim 20, Yamazaki et al., US 6,879,343, discloses a computer program product for causing a computer to execute a process for adjusting image quality

of image data, using image data generated by an image generator and image generation information that is associated with the image data and that includes at least aperture information and operating mode information at the time of generation of the image data, the computer program product comprising:

a computer-readable medium (see column 17, lines 1-5; it is inherent the microcomputer has a computer-readable medium that stores a program to execute the control program); and

it is inherent the Yamazaki reference discloses a computer program stored on the computer-readable medium, the computer program comprising:

a first program for causing a computer to analyze the image data to obtain a sharpness characteristic value indicating a characteristic relating to sharpness of the image represented by the image data (see column 16, line 64 to column 17, line 5); and

a second program for causing the computer to adjust the sharpness of the image data on the basis of the sharpness characteristic value, together with the aperture information (aperture encoder 170 detects the aperture value) and the operating mode information (performs in the hill-climbing AF mode) included in the image generation information (see column 17, lines 21-28).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2622

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al., US 6,879,343, in view of Nakami, US 2004/0234153.

In regard to claim 3, Yamazaki et al., US 6,879,343, discloses the method according to claim 1. The Yamazaki reference does not disclose wherein the image quality adjustment step includes the steps of:

judging on the basis of the operating mode information whether the operating mode in the image generator at the time of generation of the image data is portrait mode or not; and

when it is judged that the operating mode is portrait mode, executing a selected one of the following processes:

a) not executing the image adjustment; and b) executing weak sharpness adjustment that is weaker than the case where an aperture value is set under standard shooting conditions of the image generator.

Nakami, US 2004/0234153, discloses an image quality adjustment method wherein the image quality adjustment step includes the steps of:

judging on the basis of the operating mode information whether the operating mode in the image generator at the time of generation of the image data is portrait mode or not (see para 85: analyzing control information CI); and

when it is judged that the operating mode is portrait mode, executing weak sharpness adjustment that is weaker than the case where an aperture value is set

under standard shooting conditions of the image generator (see para 85: weaken the sharpness of an image in regions other than focus region using Gaussian distribution methods).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Yamazaki et al., US 6,879,343, in view of Nakami, US 2004/0234153, wherein the image quality adjustment step includes the steps of:

judging on the basis of the operating mode information whether the operating mode in the image generator at the time of generation of the image data is portrait mode or not; and

when it is judged that the operating mode is portrait mode, executing a selected one of the following processes:

a) not executing the image adjustment; and b) executing weak sharpness adjustment that is weaker than the case where an aperture value is set under standard shooting conditions of the image generator, in order to execute a sharpness adjustment without requiring an ad hoc selection processing, in the case where portrait mode is selected.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 5,946,504, discloses a method of moving the optical lens to improve the sharpness of the image.

Art Unit: 2622

US 5,323,204, discloses an exposure control apparatus adjusts the blur according the focal length and aperture setting.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gevell Selby whose telephone number is 571-272-7369. The examiner can normally be reached on 8:00 A.M. - 5:30 PM (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on 571-272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

gvs



VIVEK SRIVASTAVA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600